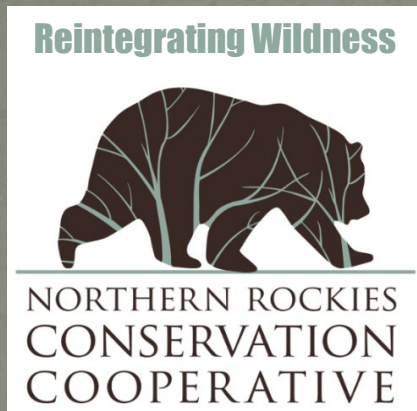


Developing range rider programs for livestock-carnivore conflict minimization

Some lessons from the Northern Rockies



MATT BARNES

Explorer, Scientist, Conservationist, Author



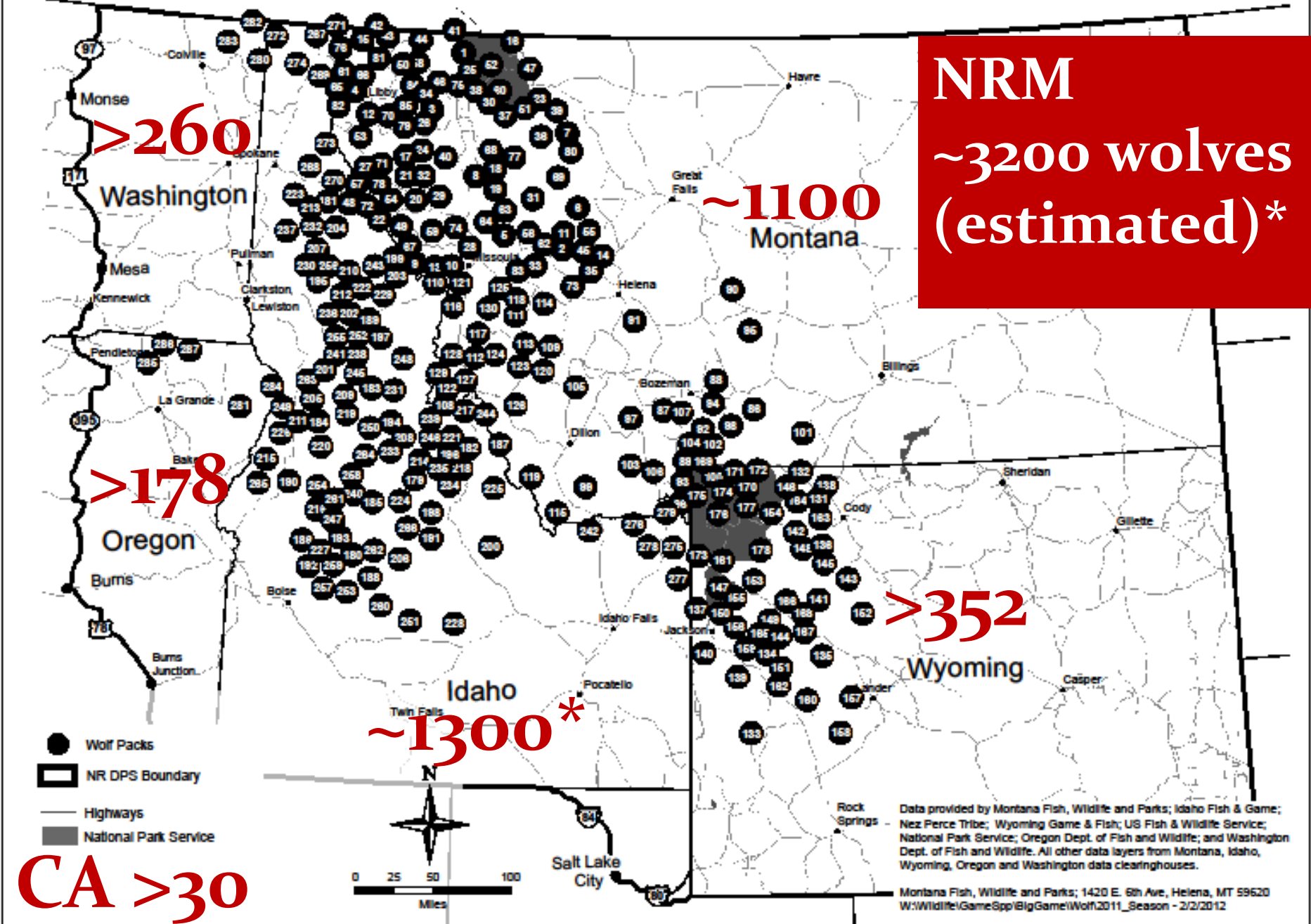
2024 November 14

Colorado Parks and Wildlife Commission | Lamar, Colorado

What to expect in Colorado?

- Probably similar to Northern Rockies
 - Similar habitat
 - Similar prey base: elk, deer (CO = MT + WY)
 - Similar human population density
 - Similar ranching practices
- Difference
 - No core refuge like Yellowstone, Glacier, or central Idaho large wilderness areas
- Working landscapes – public, private, multi-use

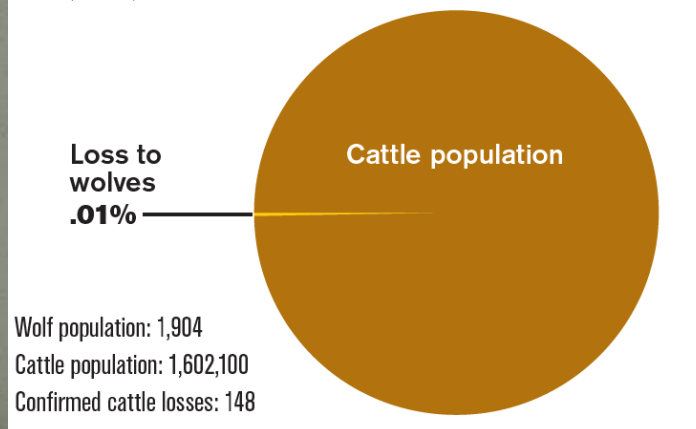
Figure 1: Northern Rocky Mountain Gray Wolf Distinct Population Segment Area



Wolf-livestock conflict

- Wolves sometimes kill livestock, but not often
- Conflicts are localized, can be acute, persistent
- Across NRM, 17-22% of wolf packs kill livestock
 - Higher in Wyoming and Oregon
- Conflicts initially increased, then decreased over years

(Counties in Idaho, Montana and Wyoming with both wolves and cattle, 2015)



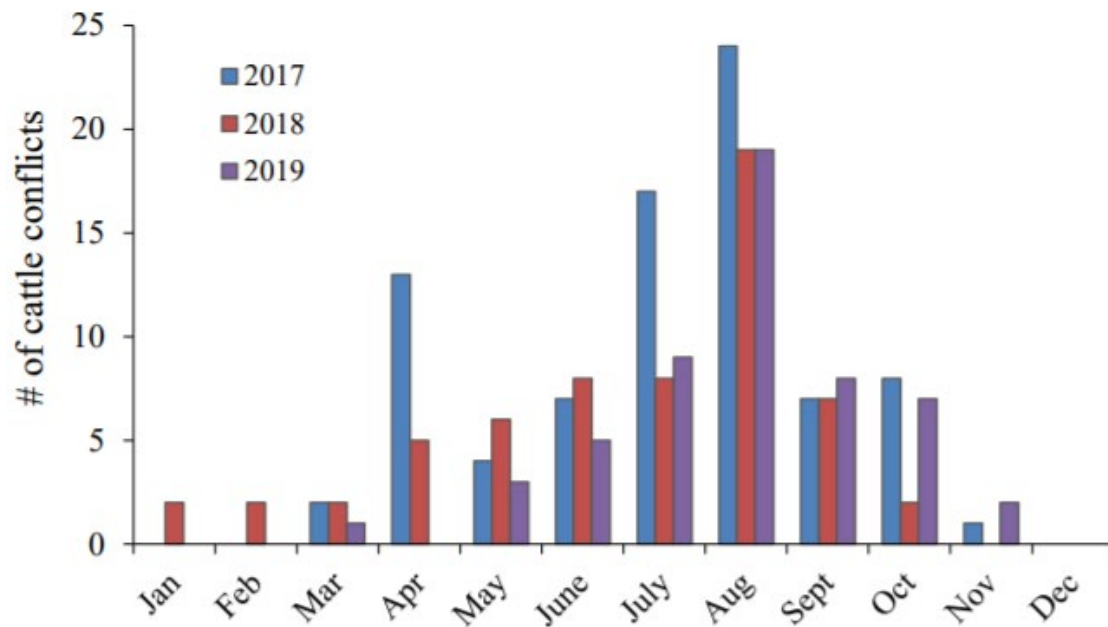


Figure 17. Number of confirmed wolf-cattle conflicts per month in WYO from 2017-2019.

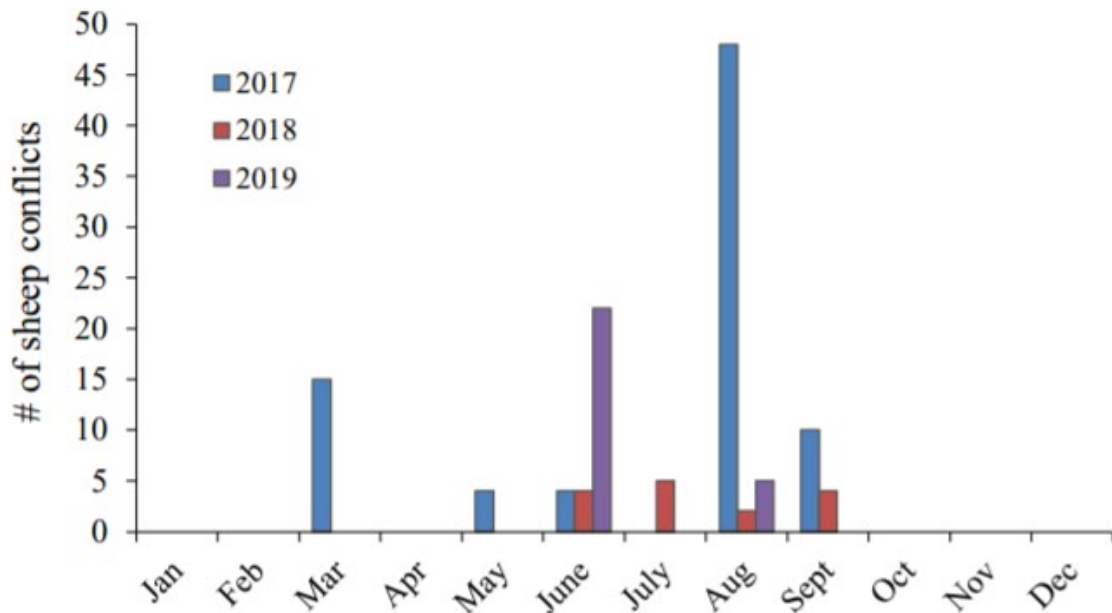


Figure 18. Number of confirmed wolf-sheep conflicts per month in WYO from 2017-2019.

Seasonal pattern

Most conflicts during summer grazing season (mostly on NFs)

In some years, a minor peak during spring calving/lambing season

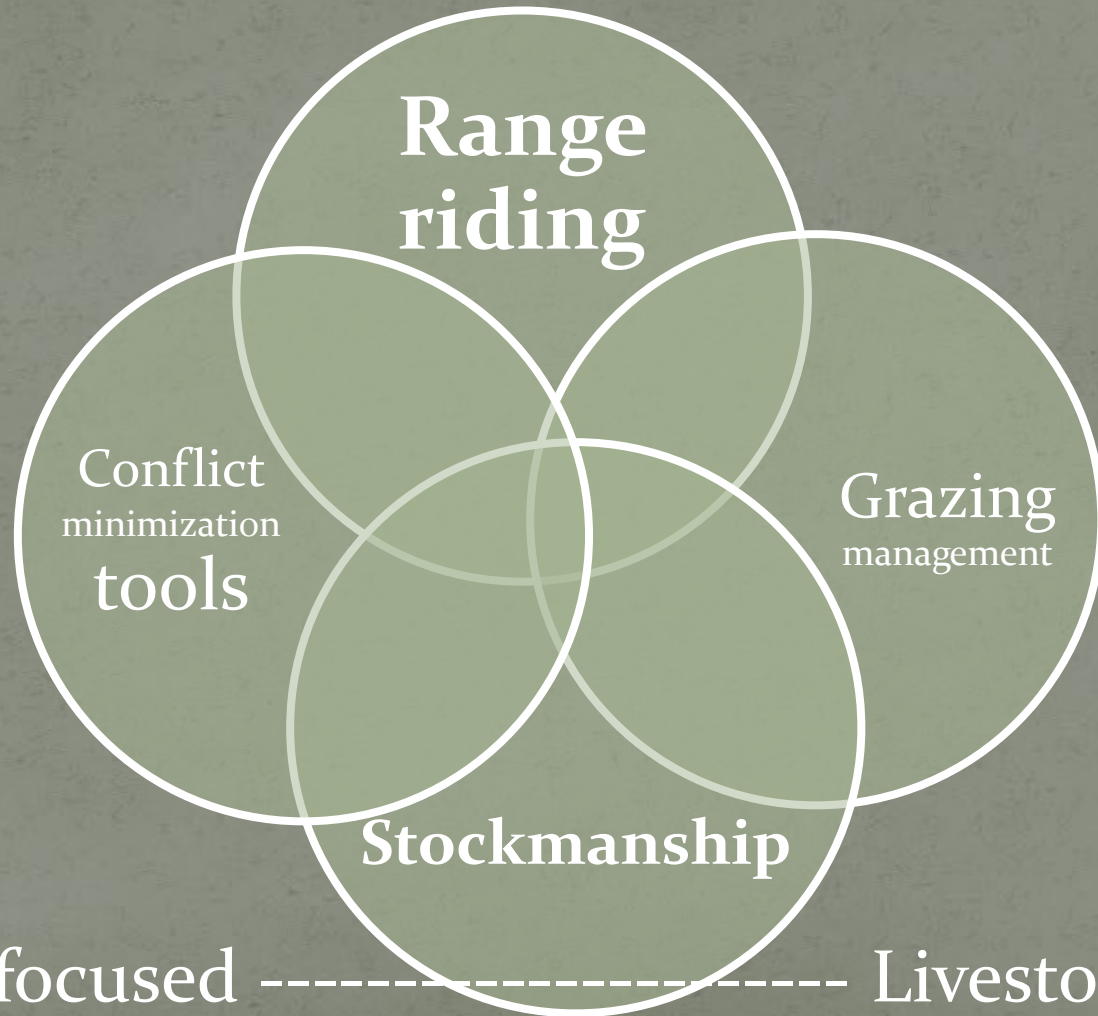
Weak link? (for livestock)

- Seasonal cycle
 - Calving
- Distribution on landscape
 - Rangelands
 - Spread out over large landscape
 - Mostly in summer

Strategies and Tools

- Strategies
 - Proactive
 - Directed toward potential prey
 - Most or all of the time
- Tools
 - Reactive
 - Directed toward potential predator
 - As needed

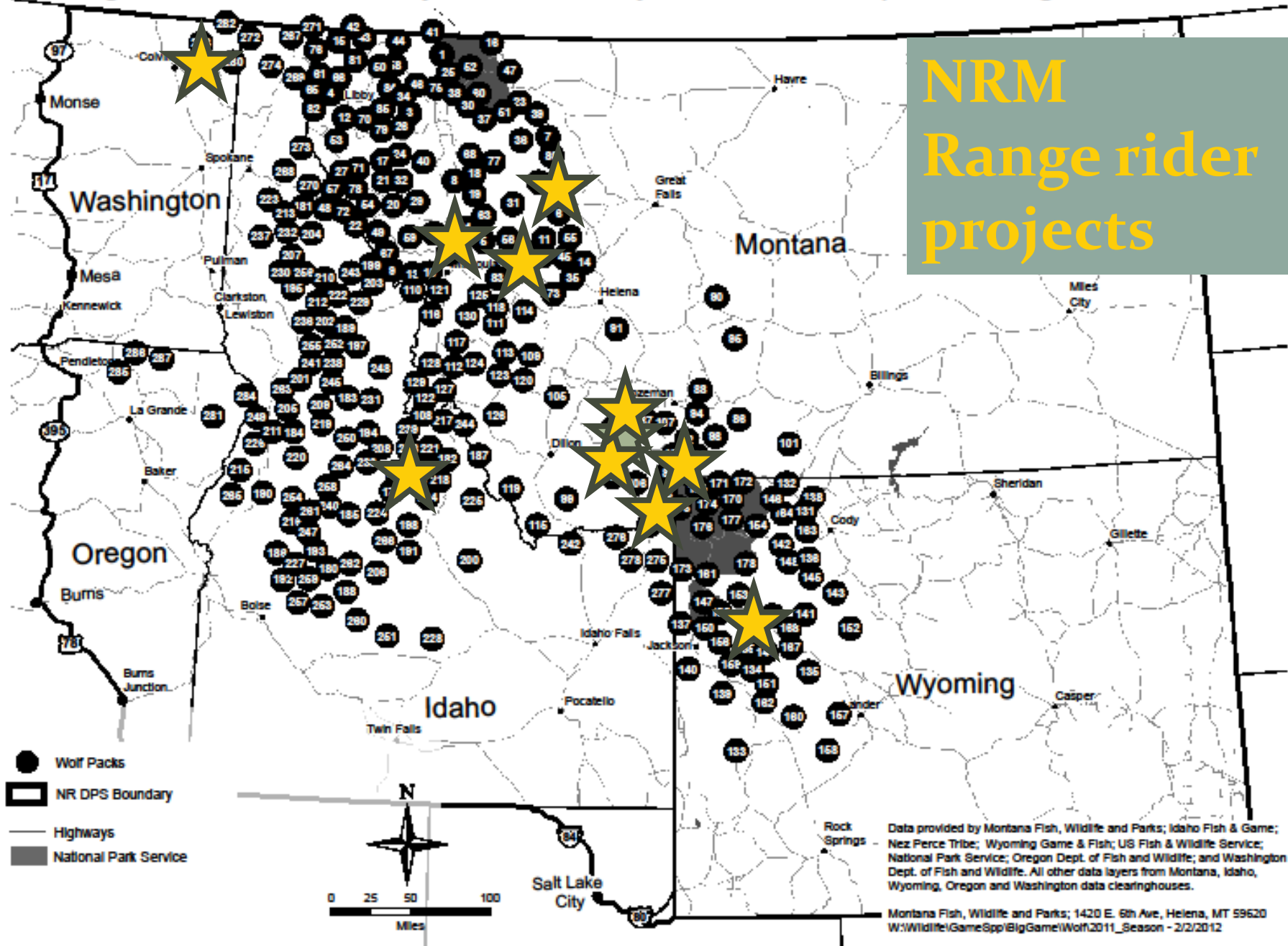
Strategies: proactive, adaptive



Predator-focused ----- Livestock-focused

Figure 1: Northern Rocky Mountain Gray Wolf Distinct Population Segment Area

NRM
Range rider
projects



Range rider programs

- Local, collaborative
 - Place-based collaborative groups
 - Watershed or livestock associations
 - Partnerships with NGOs, agencies
- State leadership
 - Funding
 - Coordination
 - Wildlife and agriculture departments
 - Local groups and NGOs

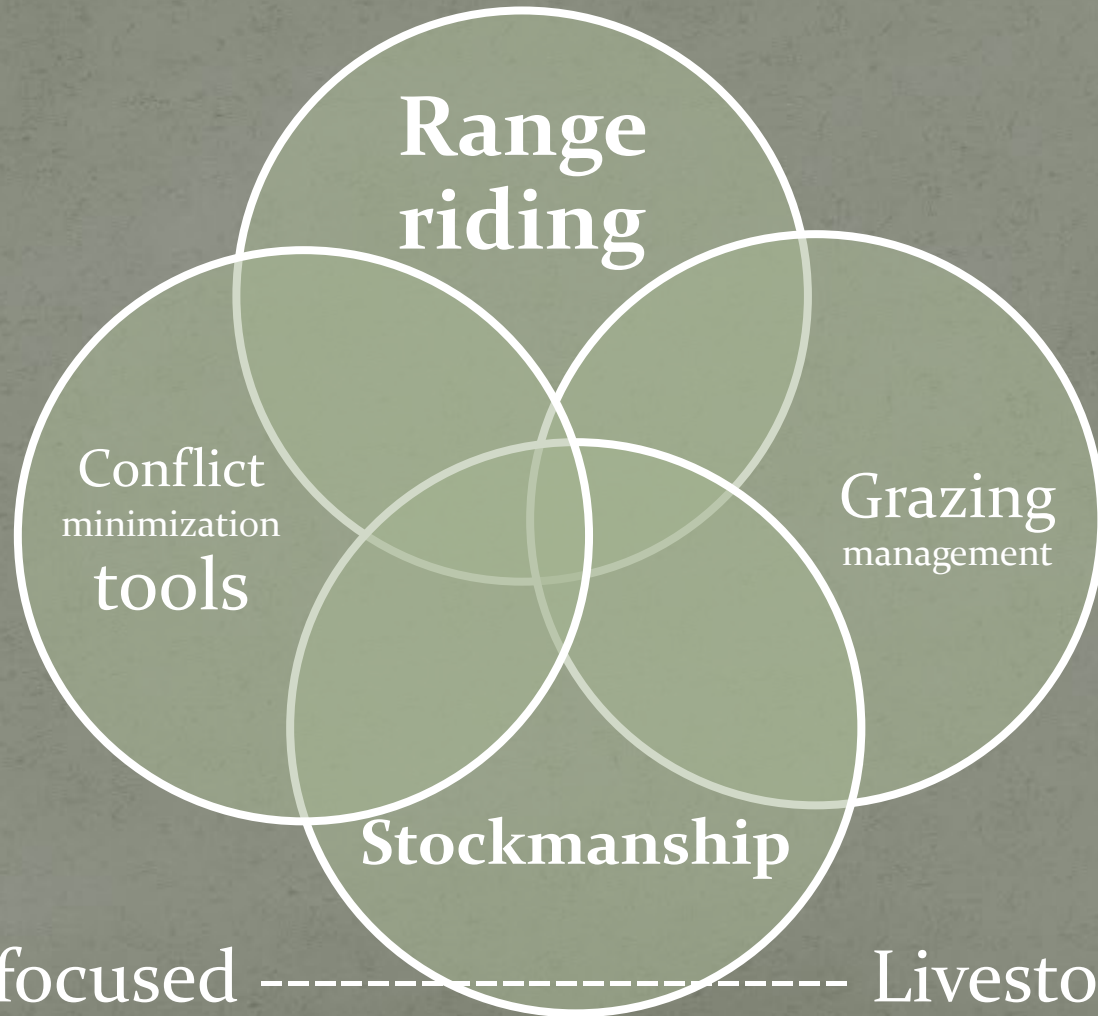
Range rider programs

- Montana
 - Livestock Loss Board
 - Funds compensation
 - Funds conflict minimization (federal funds)
 - Producers and NGOs apply for grants
- Washington
 - State funds go to two local groups
 - Local group hires and coordinates riders
 - One is a more traditional cattle association,
 - the other a place-based collaborative group

Range rider programs

- Different concepts of what it means
- Most range riders are cowboys
- Some are more like wildlife technicians
- Different purposes, definitions of success
- Predator focus vs. livestock focus
- Learning about predators, sharing info
- Managing livestock
- Reducing conflict

Strategies: proactive, adaptive



Predator-focused ----- Livestock-focused

Grazing in nature's image

Modeled on herding behavior of large ungulates
in the presence of their predators:
Aggregation and movement

- Strategic rotational grazing
 - Stocking density
- Low-stress herding
 - Herd instinct



Barnes 2015. Livestock management for coexistence with large carnivores...
[white paper]. People and Carnivores.

Grazing in nature's image

Prey aggregation (group size)

Passive anti-predator behavior



- Detection (many eyes)
- Predator confusion
- Risk dilution (selfish herd)
- Attack-abatement

Barnes 2015. Livestock management for coexistence with large carnivores...
[white paper]. People and Carnivores.

Grazing in nature's image

Prey aggregation (group size)

Active anti-predator behavior

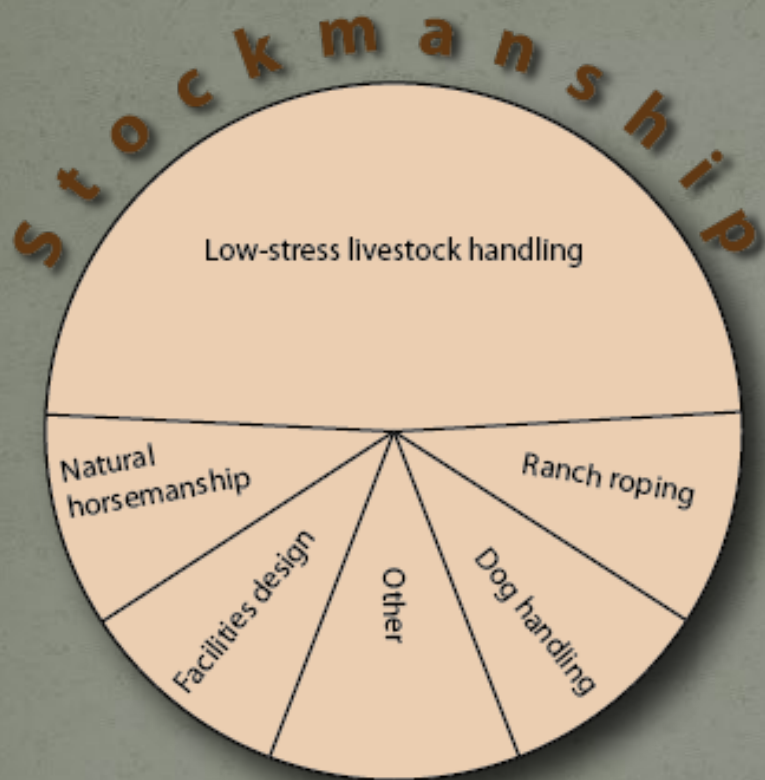


More likely to

- Stand ground
- Protect young
- Fend off a predator

Barnes 2015. Livestock management for coexistence with large carnivores...
[white paper]. People and Carnivores.

Stockmanship



Low-stress livestock handling

Developed by Bud Williams



Contrasted with “conventional”
livestock handling

Many benefits for livestock
Applications for range
management

Rekindles the herd instinct

Grazing management & predation?

Ranchers may be able to apply some of the same approaches for

- Rangeland health
 - Livestock production
- 
- Now documented
- Coexisting with wildlife
 - Preventing depredations
- 
- Wildlife behavior
Experiential
evidence
Field projects

Strategic grazing & herding projects

- Start with existing rotations
- Intensify management by
 - Rotational grazing (subdividing pastures)
 - Herding



Low-stress herding Re-kindling the herd instinct

After several days of daily *low-stress* herding,
comingled heifers began to stay together



Barnes 2015. *Stockmanship Journal* 4(1):34-43.

Low-stress herding

Re-kindling the herd instinct

After several days of daily *low-stress* herding, comingled heifers began to stay together

24 hours after herding:
Comingled heifers moving together,
no herders present



Barnes 2015. *Stockmanship Journal* 4(1):34-43.

Wind River Range, WY

Partnership with 2 ranches and Shoshone NF

Problem: co-mingled herds weren't staying together
Losses to grizzly bears and wolves



Wind River Range, WY

Partnership with 2 ranches and Shoshone NF

Problem: co-mingled herds weren't staying together
Losses to grizzly bears and wolves

Methods: range riders practicing
Low-stress herding
Combining herds, rotation



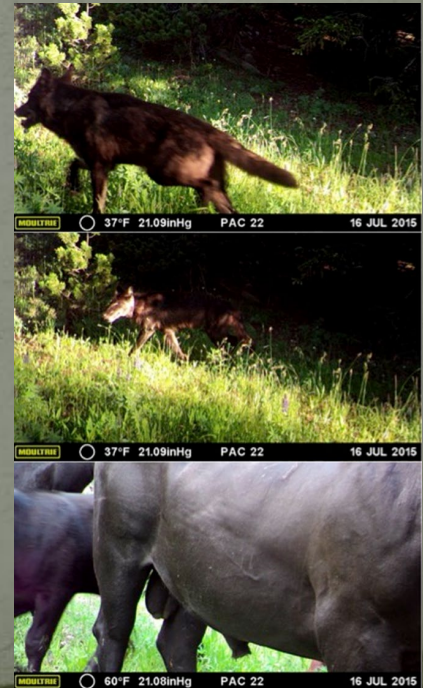
Wind River Range, WY

Partnership with 2 ranches and Shoshone NF

Problem: co-mingled herds weren't staying together
Losses to grizzly bears and wolves

Methods: range riders practicing
Low-stress herding
Combining herds, rotation

Results: better grazing management
No confirmed depredations
No removals of grizzly bears or wolves

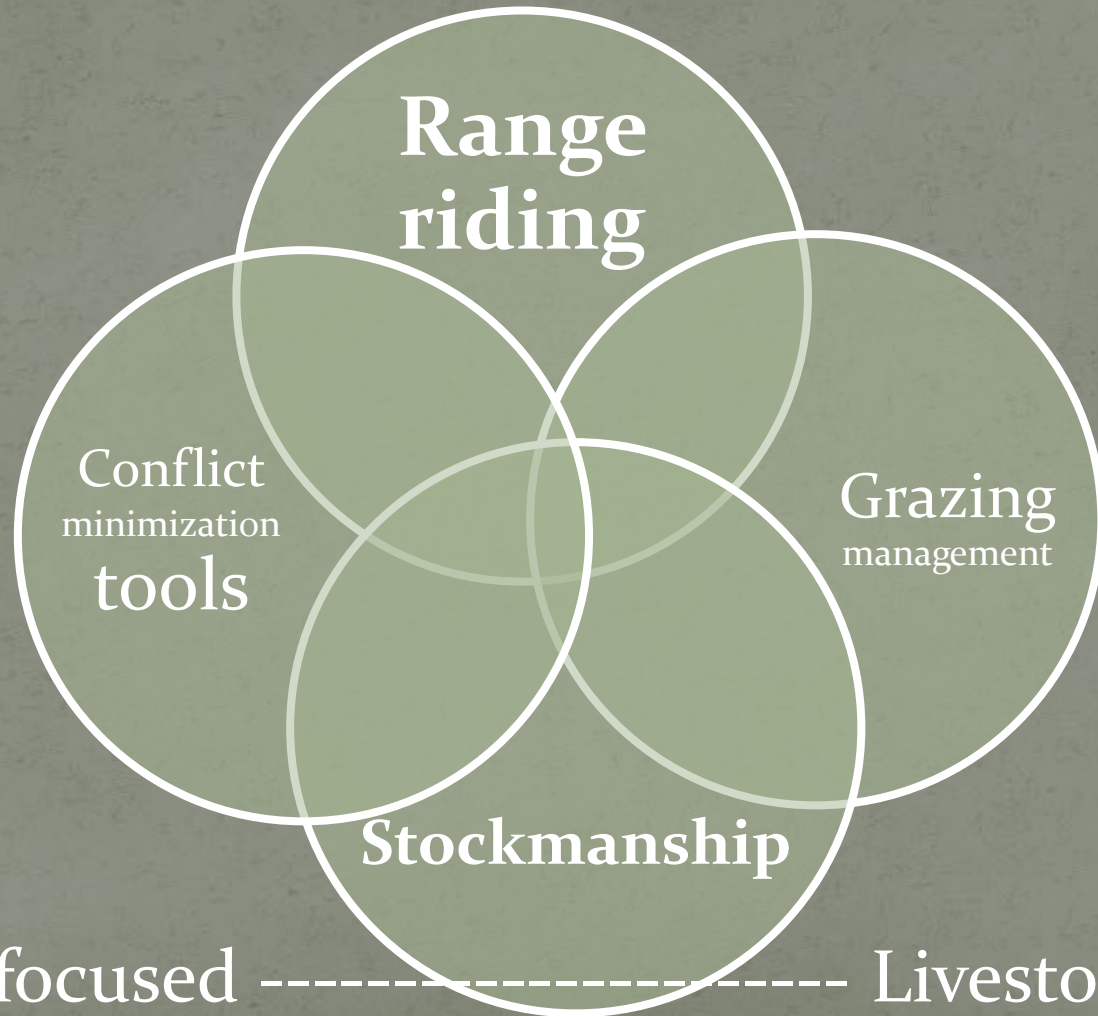


Tools used by riders in right context

- Light
 - Foxlights
- Noise
 - Radio Activated Guard (RAG) box
- Non-lethal munitions
- Barriers
 - Physical: fencing
 - Psychological: fladry



Strategies: proactive, adaptive



Predator-focused ----- Livestock-focused

Conclusions

- Livestock and predator focus both valuable
 - Livestock focus is somewhat more so
 - Range management strategies – grazing management, stockmanship may not look like conflict minimization, but they are
- Programs should be local
 - Collaborative, adaptive
- At state level, best to have one program coordinated between CPW and CDA

Ready to help

- Conservation organizations
 - Northern Rockies Conservation Cooperative
 - Rocky Mountain Wolf Project
 - Born to be Wild license plate funds
 - Defenders of Wildlife
 - Western Landowners Alliance
 - Working Circle
- Colorado State University
 - Center for Human Carnivore Coexistence
 - Extension

